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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
AUGHENBAUGH, WALTER	
ART UNIT	**PAPER NUMBER**
1772	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/661,848	MOEHLENBROCK ET AL.	
	Examiner	Art Unit	
	Walter B. Aughenbaugh	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 8-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 8-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 13, 2006 has been entered.

Acknowledgement of Applicant's Amendments

2. The amendments made in claims 1, 10 and 14 in the Amendment filed July 13, 2006 (Amdt. B) have been received and considered by Examiner.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-6 and 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forte (USPN 6,114,024) in view of Antoon, Jr. (USPN 4,910,032).

In regard to claims 1 and 14, Forte teaches a water vapor permeable, and oxygen-permeable, multilayer film (col. 1, lines 9-27 and col. 3, lines 24-28 and 39-47) comprising a first outer layer (one of the C layers), a second outer layer (the other C layer) and an intermediate microporous layer (the B layer) disposed between the first and second outer layers (col. 3, lines 24-47). The first outer layer and the second outer layer of Forte are oxygen-permeable because these layers are layers of the oxygen-permeable multilayer film of Forte (col. 1, lines 9-27 and col. 3, lines 24-47). The first and second outer layers are heat sealable since the first and second

outer layers are independently formed from a heat sealable composition because thermoplastic materials fall within the scope of the teaching of Forte of suitable materials for the first and second outer layers at col. 6, lines 46-47, 55-57 and 60-67 and because the first and second outer layers are formed by heating the unmelted solid of the suitable material, extruding the heated material and cooling the extrudate to form the final product (col. 10, line 18-col. 11, line 44) (the suitable materials for the first and second outer layers are heat sealable because the materials are heated, extruded and cooled to form the multilayer film, thus sealing the intermediate microporous layer). The first and second outer layers are independently formed from a heat sealable composition comprising polyolefin in an amount of 37 wt. % (Exxon 357C80, Tables 8 and 9 under the heading "EXTRUDER "C"" in col. 17 of Forte and col. 3, lines 24-47: Exxon 357C80 is a metallocene-catalyzed (ethylene 1-butene) copolymer as evidenced by USPN 6,111,163 to McCormack et al. at col. 13, lines 40-45; (ethylene 1-butene) copolymer is a polyolefin.

Forte fail to explicitly teach that the intermediate microporous layer is formed from an oxygen impermeable composition.

Antoon, Jr., however, disclose a container comprising a film that is substantially impermeable to oxygen and highly permeable to water vapor (col. 1, line 64-col. 2, line 7 and col. 2, lines 21-26 and 31-37). The microporous film of Antoon, Jr. is oxygen-permeable because Antoon, Jr. teach that the microporous film is substantially oxygen impermeable (col. 2, lines 22-37: a substantially oxygen impermeable film has some degree of permeability to oxygen and is therefore oxygen-permeable). Antoon, Jr. disclose that silicone-coated microporous films are suitable films for the film that is substantially impermeable to oxygen and highly permeable to

water vapor (col. 3, lines 14-17). Therefore, one of ordinary skill in the art would have recognized to have used a silicone-coated microporous film as the intermediate microporous layer of Forte since silicone-coated microporous film is well known to be a water vapor permeable microporous film as taught by Antoon, Jr..

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a silicone-coated microporous film as the intermediate microporous layer of Forte since silicone-coated microporous film is well known to be a water vapor permeable microporous film as taught by Antoon, Jr.

In further regard to claim 14, while Forte teach that an application for the film is food packaging (col. 1, lines 34-37), Forte fail to explicitly teach a package comprising the multilayer film as discussed above that comprises an oxygen sensitive product.

Antoon, Jr., however, disclose a package comprising an oxygen sensitive product (col. 1, lines 64-67) comprising a film that is substantially impermeable to oxygen and highly permeable to water vapor (col. 2, lines 21-26 and 31-37). Therefore, one of ordinary skill in the art would have recognized to have formed a package out of the film taught by Forte and Antoon, Jr. as discussed above, and to have stored an oxygen sensitive product in the package as taught by Antoon, Jr. since it is well known to form packages from a film that is substantially impermeable to oxygen and highly permeable to water vapor to store and protect an oxygen sensitive product as taught by Antoon, Jr.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed a package out of the film taught by Forte and Antoon, Jr. as discussed above, and to have stored an oxygen sensitive product in the package as taught by Antoon, Jr.

since it is well known to form packages from a film that is substantially impermeable to oxygen and highly permeable to water vapor to store and protect an oxygen sensitive product as taught by Antoon, Jr.

In regard to claim 2, Forte teach that polyesters and polyamides are suitable materials for the outer layers (col. 6, lines 45-47 and 55-56). While Forte and Antoon, Jr. fail to explicitly teach that the heat sealable composition exhibits an oxygen transmission rate that is higher than that of the oxygen impermeable composition by the claimed amount, Antoon, Jr. teach an oxygen permeable layer formed of polyester (PET or PBT) or polyamide (nylon) (col. 4, lines 1-4) where the oxygen permeability of the oxygen permeable layer is between 5,000 and 10,000,000 cc/100 in^2-atm-day (col. 2, lines 37-40). Since Antoon, Jr. teaches that the oxygen permeability of the oxygen permeable layer is between 5,000 and 10,000,000 cc/100 in^2-atm-day, it follows that the oxygen permeability of the oxygen impermeable layer is less than 5,000 cc/100 in^2-atm-day. Therefore, one of ordinary skill in the art would have recognized to have used a film having an oxygen permeability that is at least 50 cc-mil/100 in^2-atm-day higher than that of the oxygen impermeable layer of the film taught by Forte and Antoon, Jr. for use as the heat sealable layer of the film taught by Forte and Antoon, Jr. since it is well known to use films having an oxygen permeability of between 5,000 and 10,000,000 cc/100 in^2-atm-day as a heat sealable layer formed of polyester or polyamide as taught by Antoon, Jr. Note that selection of a film having an oxygen permeability of 5,050 cc/100 in^2-atm-day or greater guarantees that the film has an oxygen permeability of at least 50 cc-mil/100 in^2-atm-day higher than that of an oxygen impermeable layer as taught by Antoon, Jr.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a film having an oxygen permeability that is at least 50 cc-mil/100 in^2-atm-day higher than that of the oxygen impermeable layer of the film taught by Forte and Antoon, Jr. for use as the heat sealable layer of the film taught by Forte and Antoon, Jr. since it is well known to use films having an oxygen permeability of between 5,000 and 10,000,000 cc/100 in^2-atm-day as a heat sealable layer formed of polyester or polyamide as taught by Antoon, Jr.

In regard to claims 3 and 4, in the instance where the heat sealable composition is polypropylene as taught by Forte at col. 5, lines 19-24 and where the oxygen impermeable composition is cellophane as taught by Antoon, Jr. at col. 3, lines 14-17, the melting point of the oxygen impermeable composition is 10°C higher than that of the heat sealable composition as evidenced by US 5,358,785 to Akao et al. at col. 16, lines 32 and 41, and the modulus of the oxygen impermeable composition is about 70,000 psi higher than that of the heat sealable composition as evidenced by US 5,358,785 to Akao et al. at col. 16, lines 32 and 41 (90 kg force/mm^2 is about 130,000 psi and 140 kg force/mm^2 is about 200,000 psi).

In regard to claim 5, Forte teaches that the first four polymers claimed in claim 5, and polyesters, are suitable materials for the intermediate microporous layer (col. 5, lines 10, 19-20 and 23-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used any of these materials taught by Forte as the material of the film of the silicone-coated microporous film of Antoon, Jr.

In regard to claim 6, Forte teaches that polypropylene/alpha-olefin copolymer is a suitable material for the intermediate microporous layer of Forte (col. 5, lines 10 and 23-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to have used the polypropylene/alpha-olefin copolymer taught by Forte as the material of the film of the silicone-coated microporous film of Antoon, Jr.

In regard to claim 8, metallocene-catalyzed (ethylene 1-butene) copolymer (Exxon 357C80 as evidenced by USPN 6,111,163 to McCormack et al. at col. 13, lines 40-45) is an ethylene/alpha olefin copolymer.

In regard to claim 9, Forte teaches that the heat sealable composition of the outer layers comprises linear low density polyethylene (col. 7, lines 1-18).

In regard to claim 15, Antoon, Jr. teach that the film completely encloses the oxygen-sensitive product (col. 12, lines 52-54), so it would have been obvious to one of ordinary skill in the art at the time the invention was made to have completely enclosed the oxygen-sensitive product with the film taught by Forte and Antoon, Jr. since it is well known to completely enclose an oxygen-sensitive product with an oxygen impermeable film to store and protect the product as taught by Antoon, Jr.

In regard to claim 16, Antoon, Jr. teach that the oxygen-sensitive product is a fruit or a vegetable (col. 1, lines 64-68).

In regard to claim 17, Antoon, Jr. teach that the multilayer film is lidding stock (col. 5, lines 42-44).

In regard to claim 10, Forte teaches a water vapor permeable, and oxygen-permeable, multilayer film (col. 1, lines 9-27 and col. 3, lines 24-28 and 39-47) comprising a first outer layer (one of the C layers), a second outer layer (the other C layer), a center layer (the B layer), a first intermediate microporous layer (one of the A layers) disposed between the first outer layer and the center layer and a second intermediate microporous layer (the other A layer) disposed

between the second outer layer and the center layer (col. 3, lines 24-47). The first outer layer, the second outer layer and the center layer of Forte are oxygen-permeable because these layers are layers of the oxygen-permeable multilayer film of Forte (col. 1, lines 9-27 and col. 3, lines 24-47). The first and second outer layers are heat sealable since the first and second outer layers are independently formed from a heat sealable composition because thermoplastic materials fall within the scope of the teaching of Forte of suitable materials for the first and second outer layers at col. 6, lines 46-47, 55-57 and 60-67 and because the first and second outer layers are formed by heating the unmelted solid of the suitable material, extruding the heated material and cooling the extrudate to form the final product (col. 10, line 18-col. 11, line 44) (the suitable materials for the first and second outer layers are heat sealable because the materials are heated, extruded and cooled to form the multilayer film, thus sealing the intermediate microporous layer). The first and second outer layers independently comprise a heat sealable composition comprising polyolefin in an amount of 37 wt. % (Exxon 357C80, Tables 8 and 9 under the heading "EXTRUDER "C"" in col. 17 of Forte and col. 3, lines 24-47: Exxon 357C80 is a metallocene-catalyzed (ethylene 1-butene) copolymer as evidenced by USPN 6,111,163 to McCormack et al. at col. 13, lines 40-45; (ethylene 1-butene) copolymer is a polyolefin. The center layer independently comprises a heat sealable composition comprising polyolefin in an amount of 20 wt. % (Exxon 357C80, Tables 8 and 9 under the heading "EXTRUDER "B"" in col. 17 of Forte and col. 3, lines 24-47).

Forte teach that the intermediate microporous layers must allow water vapor to pass through (col. 7, lines 40-42).

Forte fail to explicitly teach that the intermediate microporous layers each independently comprise an oxygen impermeable composition.

Antoon, Jr., however, disclose a container comprising a film that is substantially impermeable to oxygen and highly permeable to water vapor (col. 1, line 64-col. 2, line 7 and col. 2, lines 21-26 and 31-37). Antoon, Jr. disclose that silicone-coated microporous films are suitable films for the film that is substantially impermeable to oxygen and highly permeable to water vapor (col. 3, lines 14-17). Therefore, one of ordinary skill in the art would have recognized to have used a silicone-coated microporous film as the first and second intermediate microporous layers of Forte since silicone-coated microporous film is well known to be a water vapor permeable microporous film as taught by Antoon, Jr.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a silicone-coated microporous film as the first and second intermediate microporous layers of Forte since silicone-coated microporous film is well known to be a water vapor permeable microporous film as taught by Antoon, Jr.

In regard to claim 11, Forte teaches that propylene/alpha-olefin copolymer is a suitable material for the center layer (col. 5, lines 10 and 23-26). Forte also teaches that the intermediate microporous layers comprise a mixture of the polymers used in the center layer and the outer layers (col. 7, lines 52-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the propylene/alpha-olefin copolymer taught by Forte in the material of the film of the silicone-coated microporous film of Antoon, Jr.

In regard to claim 12, metallocene-catalyzed (ethylene 1-butene) copolymer (Exxon 357C80 as evidenced by USPN 6,111,163 to McCormack et al. at col. 13, lines 40-45) is an ethylene/alpha olefin copolymer.

In regard to claim 13, Forte teaches that the heat sealable composition of the outer layers comprises linear low density polyethylene (col. 7, lines 1-18).

Response to Arguments

5. Applicant's arguments presented on pages 6-9 of Amdt. B regarding the 35 U.S.C. 103 rejection of claims 1, 10 and 14 have been fully considered but are not persuasive.

As stated in the new 35 U.S.C. 103 rejection made of record in this Office Action, the outer layers are heat sealable since the first and second outer layers are independently formed from a heat sealable composition because thermoplastic materials fall within the scope of the teaching of Forte of suitable materials for the first and second outer layers at col. 6, lines 46-47, 55-57 and 60-67 and because the first and second outer layers are formed by heating the unmelted solid of the suitable material, extruding the heated material and cooling the extrudate to form the final product (col. 10, line 18-col. 11, line 44) (the suitable materials for the first and second outer layers are heat sealable because the materials are heated, extruded and cooled to form the multilayer film, thus sealing the intermediate microporous layer).

The other recitations added to claims 1, 10 and 14 in Amdt. B are addressed in the new 35 U.S.C. 103 rejection made of record in this Office Action.

Col. 7, lines 1-18 teach that the C layers comprise LLDPE since Forte et al. use the word "also" in col. 7, line 12: Forte et al. teach, via "also", that when the free flow agent is LLDPE, the microporous layers and the C layers can comprise the LLDPE free flow agent.

Applicant's statement in the first paragraph of page 9 of Amdt. B that "[a]pparently Forte contemplates employing the Viton fluoroelastomer agents for the outer layers, and the Ampacet agents for the microporous layers" is unsupported, and ignores the use of the word "also" in col. 7, line 12 of Forte et al.

Applicant's argument in the second paragraph of page 9 of Amdt. B is moot due to the new 35 U.S.C. 103 rejection made of record in this Office Action. Applicant's "presum[ption]" in the last sentence of the second paragraph of page 9 of Amdt. B is unsupported.

Applicant does not claim a polymer such as "LLDPE [that] comprise[s] a primary polymer present in at least about 20% by weight of the composition forming the outer layers" as Applicant states in the third paragraph of page 9 of Amdt. B.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. While the examiner sets his work schedule under the Increased Flexitime Policy, he can normally be reached on Monday-Friday from 8:45am to 5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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